A3.1

Types of Operating Systems

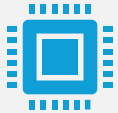
Types of Operating Systems

- A3.1.1 Batch
- A3.1.2 Distributed
- A3.1.3 Multitasking
- A3.1.4 Network OS
- A3.1.5 Real-time OS
- A3.1.6 Mobile OS
- A3.1.7 Single use
- A3.1.8 Multi-user

A3.1.1 - Batch Operating System

A batch operating system executes jobs in groups without user interaction.

It processes tasks one after another.

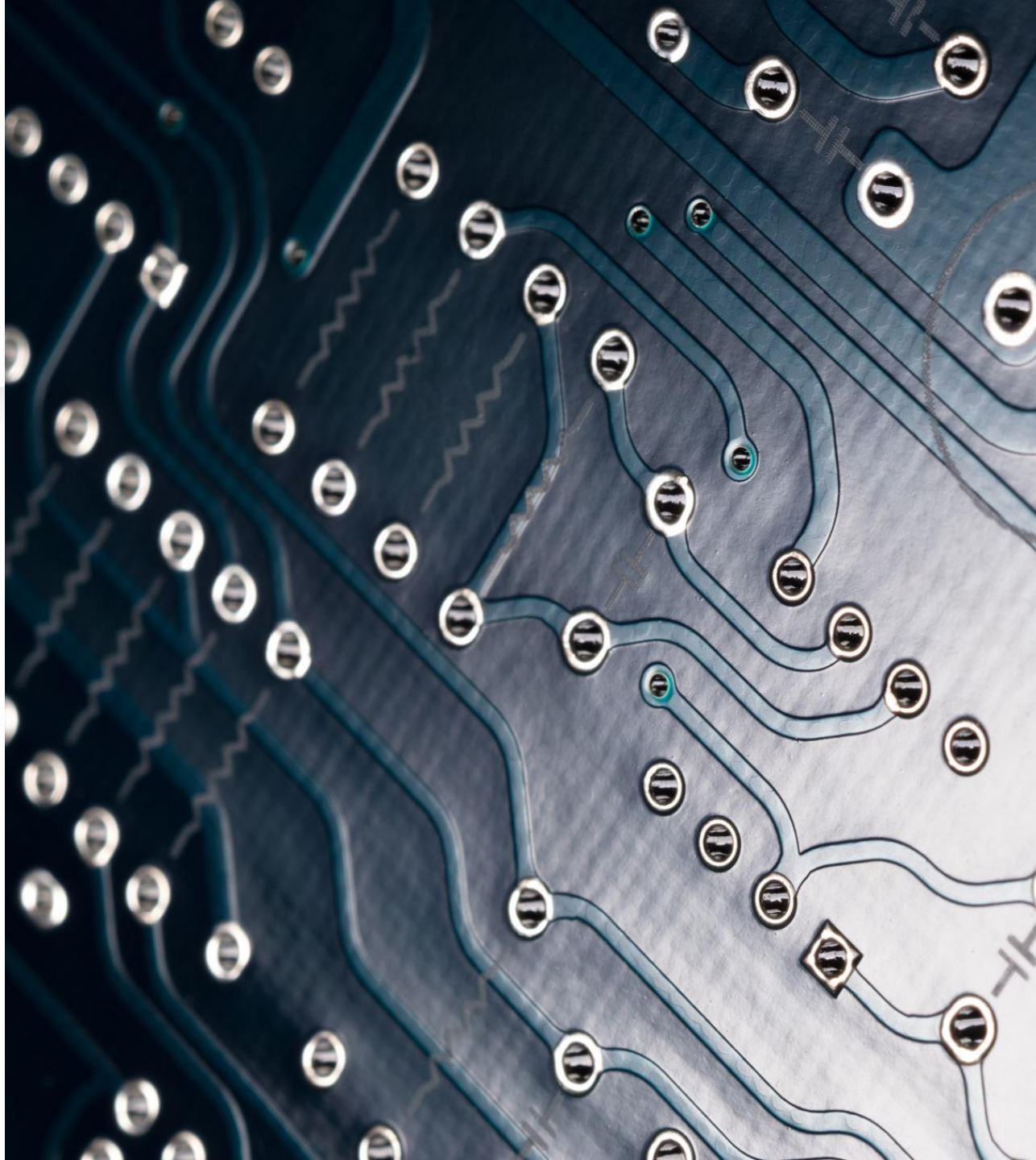


It is mainly used in mainframes for large calculations.

Example: IBM mainframe OS.

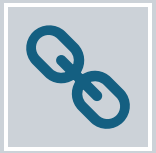
A3.1.2 - Distributed OS

- A distributed OS runs on multiple connected computers.
- It shares resources and data across the network.
- Users see it as a single system.
- Example: Plan 9 From Bell Labs; treats all resources as part of a unified file system.



A3.1.3 - Multitasking OS

A multitasking OS allows multiple programs to run at the same time.

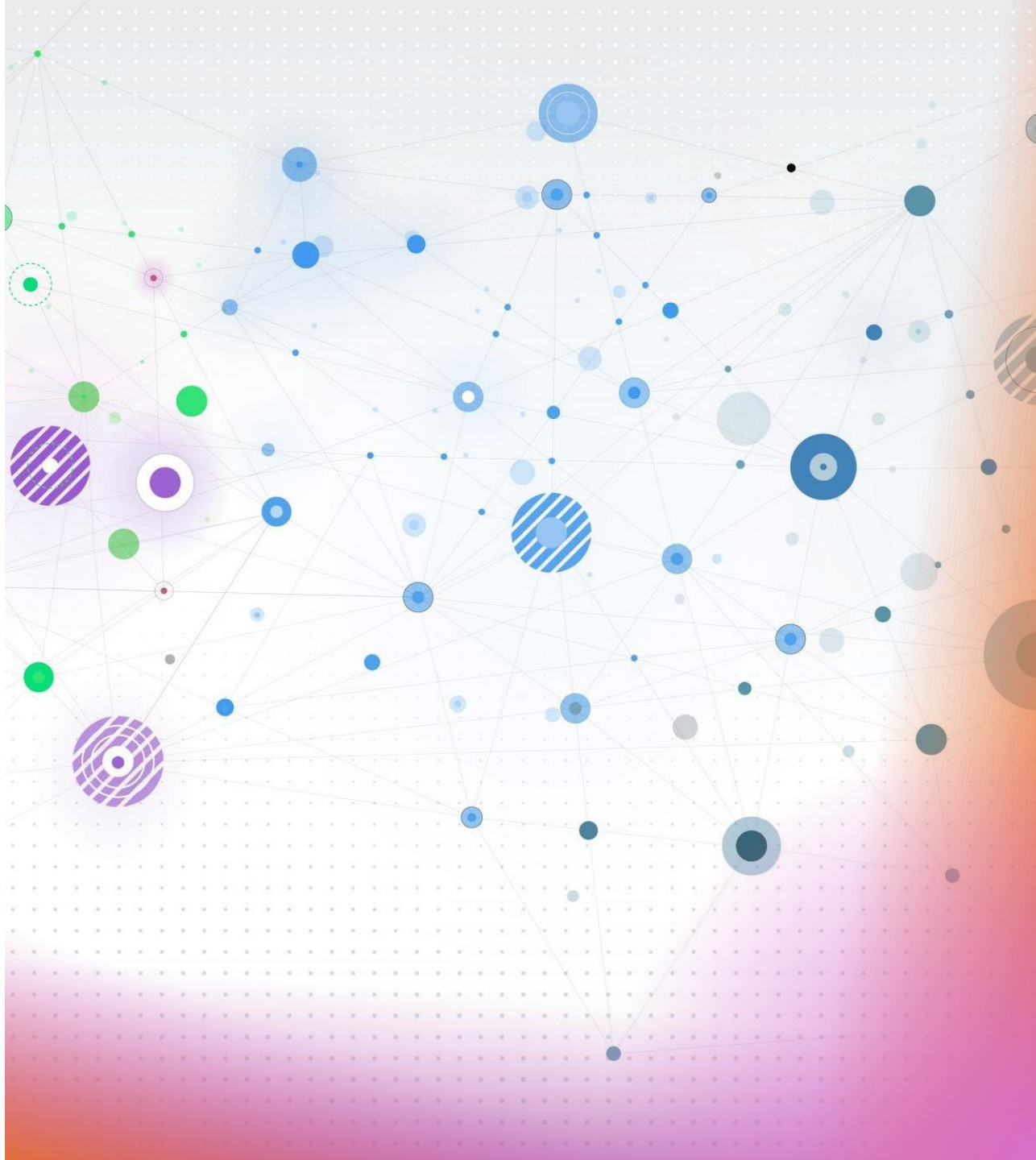


It switches between tasks quickly.

Example: Windows 11.

A3.1.4 - Network OS

- A network OS manages network resources and connections.
- It allows computers to communicate and share files.
- Example: Novell NetWare.



A3.1.5 - Real-time OS

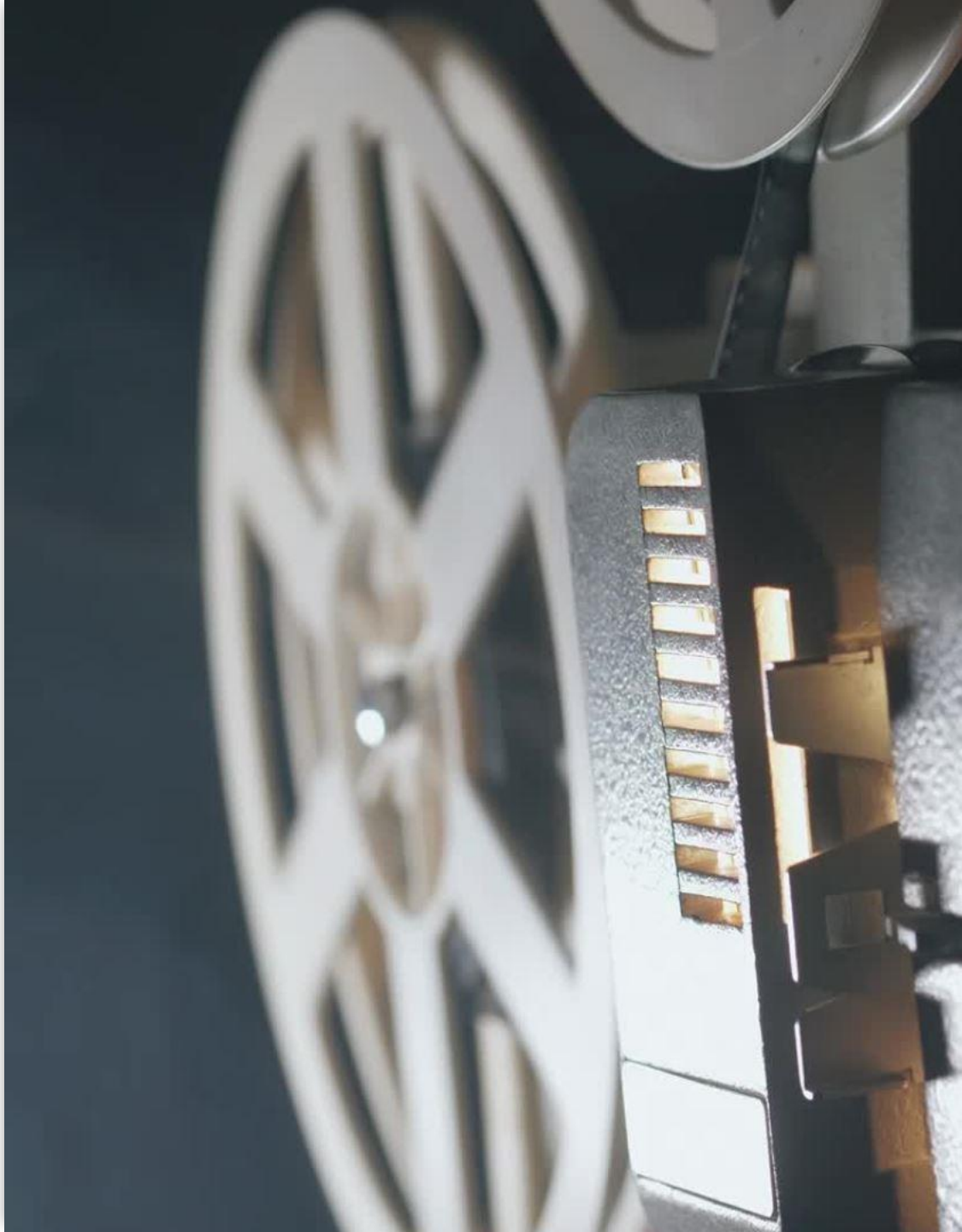
- A real-time OS responds instantly to inputs.
- It is used in machines where timing is critical.
- Example: VxWorks.

A3.1.6 - Mobile OS

- A mobile OS runs smartphones and tablets.
- It manages apps, memory, and hardware.
- Example: Android and Android.

A3.1.7 - Single-use OS

- A single-use OS is designed for one specific device.
- It is simple and lightweight.
- Example: Embedded OS in ATMs.



A3.1.8 - Multi-user OS

- A multi-user OS allows many people to use a computer at once.
- It keeps accounts and files separate for each user.
- Example: Linux Server OS.